

A new genus of the Rogadinae-Lysitermini from Kazakhstan (Hym.: Braconidae)

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ABSTRACT. — *Tritermus* gen. nov. is described from Kazakhstan; type-species and only known species is *Tritermus tobiasi* spec. nov. *Prolysitermus* Tobias, 1971, is synonymized with *Lysitermus* Foerster, 1862.

INTRODUCTION

In 1971 Tobias erected a new genus, *Prolysitermus*, for a new species of the Lysitermini (Braconidae, Rogadinae) with the 1st and 2nd metasomal tergites movably joined to each other. Another species with both tergites immovably joined was placed by Tobias in the genus *Lysitermus* Tobias, 1862. During my visit in 1979 to the Zoological Museum of the Humboldt University at Berlin I was able to examine the types of the type-species of *Lysitermus*, *L. pallidus* Foerster, 1862, which proved to be congeneric with *Prolysitermus* Tobias, 1971. The result is that *Prolysitermus* becomes a new synonym of *Lysitermus* Foerster, 1862, and that the genus named *Lysitermus* by Tobias has to be renamed. In this paper this taxon is described and illustrated; Dr. V. I. Tobias (Leningrad) kindly lent me the only known specimen, where upon the description is based.

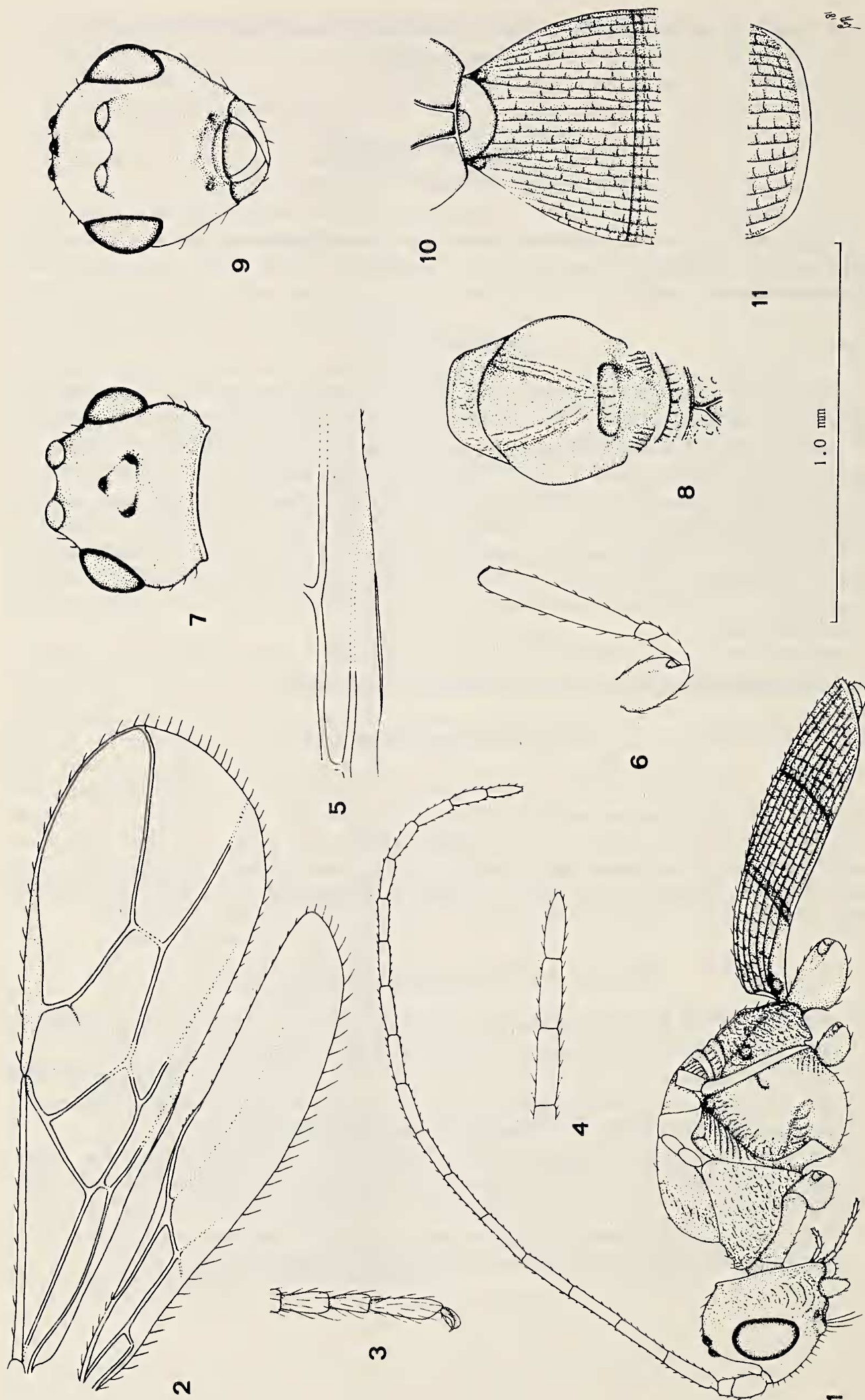
Biological data on the Lysitermini are scarce; the few data available indicate that the Lysitermini are ectoparasites of caterpillars of Psychidae and Xyloryctidae.

Tribe Lysitermini Tobias, 1968

Diagnosis. — Occipital and prepectal carinae present; clypeus dorsally convex and transverse, ventrally depressed; scapus distinctly longer than pedicellus (fig. 1); vein M+CU of hind wing equal to vein 1-M or shorter, exceptionally (in *Lysitermus*) somewhat longer; dorsal carinae of 1st tergite of metasomal united basally, forming a semicircular carina (fig. 10); 1st-3rd metasomal tergites heavily sclerotized and coarsely sculptured; spiracle of 3rd tergite in its notum.

Key to the Palaearctic genera of the Lysitermini

1. Vein 2-SR of fore wing largely sclerotized; metanotum more or less acutely protruding dorsally; posterior corners of 3rd tergite of metasoma more or less protruding *Acanthormius* Ashmead, 1906
- Vein 2-SR of fore wing largely absent, at most as an unsclerotized trace (fig. 2); metanotum not protruding dorsally (fig. 1); 3rd tergite truncate posteriorly (fig. 11) 2
2. First tergite immovably connected to 2nd tergite (fig. 1); vein CU1b of fore wing absent (fig. 5), resulting in an open 1st subdiscal cell; dorsope medium-sized and visible dorsally (fig. 10) *Tritermus* gen. nov.
- First tergite movably connected to 2nd tergite; vein CU1b of fore wing present, resulting in a closed 1st subdiscal cell; dorsope absent, or only visible laterally and small *Lysitermus* Foerster, 1862.



Tritermus gen. nov.

Lysitermus sensu Tobias, 1971: 20 (key) & 1976: 24 (key).

Type-species: *Tritermus tobiasi* spec. nov.

Etymology: from „tri” (three) and „termos” (Greek for „boundary”) because the carapace consists of three parts.

Diagnosis. — Scapus rather robust (fig. 1); pedicellus about half length of scapus; occipital carina connected to hypostomal carina; eyes comparatively small (fig. 9); metanotum rather flat, not protruding; scutellar sulcus superficially impressed; medial carina of propodeum short (fig. 8); episternal scrobe deep; vein 2-SR of fore wing largely absent; vein CU1b absent, resulting in an open 1st subdiscal cell of fore wing (fig. 5); vein M+CU of hind wing shorter than vein 1-M; pterostigma slender (fig. 2); vein r leaving pterostigma in front of middle; vein m-cu of fore wing converging posteriorly to vein 1-M; vein CU1b of fore wing at about same level as vein 2-CU1 (fig. 2); first tergite immovably connected to 2nd tergite; dorsope medium-sized, deep, dorsally visible (fig. 10); apex of 3rd tergite narrowly lamelliform, simple and truncate (fig. 11).

Distribution. — Palaearctic: one species.

Tritermus tobiasi spec. nov. (figs. 1-11)

Lysitermus pallidus sensu Tobias, 1971: 68 & 1976: 49.

Holotype, ♂, length of both body and fore wing 1.7 mm.

Head. — Antennal segments 19, length of 3rd segment equal to 4th segment, both 3.4 times as long as the maximum width, penultimate segment 3.2 times its width (fig. 4), and apical segment with no spine; maxillary and labial palp with 6 and 4 segments, respectively; length of maxillary palp 0.7 times height of head; hypostomal carina joins occipital carina about 0.9 times width of mandibular base above mandible; occipital carina complete; eye not emarginate; length of eye in dorsal view 1.1 times temple; temple coriaceous, rather dull, roundly narrowed posteriorly (fig. 7); PGL : Ø ocellus : OOL = 26 : 7 : 21; frons slightly convex and superficially coriaceous; vertex coriaceous; face strongly convex, shiny and (except medio-ventrally) coriaceous; clypeus largely smooth; apical margin of clypeus not differentiated; epistomal suture complete; labrum rather flat and glabrous; malar suture absent; mandible twisted apically, 2nd tooth obtuse and much shorter than acute 1st tooth; length of malar space 1.7 times basal width of mandible.

Mesosoma. — Length of mesosoma 1.3 times its height; pronope absent; mesosternal groove smooth and deep; side of pronotum coriaceous-rugose (fig. 1); prepectal carina complete, not reaching anterior margin of mesopleuron; epicnemial area rugose; precoxal sulcus in anterior half of mesopleuron deeply impressed and with some rugae, posteriorly absent (fig. 1); pleural sulcus smooth; metapleural flange rather small (fig. 1); metapleuron rugose; notauli not distinctly impressed, but notaulic area with some rugae and setae, rest of mesoscutum glabrous, rather flat and shiny coriaceous, except latero-posteriorly; mesoscutum without medio-longitudinal depression; scutellum rather convex and rather dull coriaceous; metanotum with short, weak carina medially (fig. 8); posterior surface of propodeum not differentiated and with long areola; surface of propodeum rugose; propodeal spiracle small and round.

Wings. — Fore wing: r : 3-SR : SR1 : r-m = 5 : 20 : 41 : 7; 1-SR+M straight; r somewhat longer than width of pterostigma; SR1 straight basally, curved subapically (fig. 2); cu-a minute; 1-CU1 : 2-CU1 = 1 : 9; parastigma scarcely developed; m-cu postfurcal and posteriorly con-

Figs. 1-11. *Tritermus tobiasi* gen. et spec. nov., holotype. 1, habitus, lateral aspect; 2, wings; 3, outer middle claw; 4, apex of antenna; 5, detail of 1st subdiscal cell of fore wing; 6, hind leg; 7, head, dorsal aspect; 8, mesosoma, dorsal aspect; 9, head, frontal aspect; 10, 1st tergite, dorsal aspect; 11, apex of 3rd tergite, dorsal aspect. 1, 2, 6: scale-line (= 1 ×), 3-5: 2 ×, 7-11: 1.4 ×

verging to 1-M. Hind wing: cu-a short; m-cu present (fig. 2); $M+CU : 1-M = 14 : 17$.

Legs. — Hind coxa smooth; tarsal claws minute and slender, setose and with no lobe (fig. 3); length of hind femur 5.0 times its width, [hind tibia and tarsus missing].

Metasoma. — Length of 1st tergite 0.7 times its apical width; carapace (consisting of 3 basal segments) longitudinally striate, with interspaces weakly transversely sculptured (fig. 10); 1st tergite flat basally; 4th and following tergites completely retracted; carapace with some scattered setae.

Colour. — Dark reddish-brown; pterostigma, wing veins, palpi, legs, pronotum and 1st metasomal tergite, (light) brown; wing membrane hyaline.

Holotype in the Zoological Museum, Leningrad: the locality-label is in Russian, its translation is as follows: „Hills Salyk, Saur Range [= East Kazakhstan], 2000 m, meadow with different grasses, Tobias, 6.VI.1961”; „*Lysitermus pallidus* Först., det Tobias, 1962”.

Note. — It is a pleasure to me to name this species after Dr. V. I. Tobias (Leningrad), who has provided very important material for my generic revision of the Braconidae.

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HET EERDER BEGINNEN VAN DE VLEGTIJD VAN VLINDERMANNETJES. In zijn verslag van een kweek van *Aphomia sociella* (Linnaeus) (*Ent. Ber.*, Amst. 42: 39, 1982) vermeldt de heer Goutbeek, dat de mannetjes eerder begonnen uit te komen dan de wijfjes. Hetzelfde merkte Th. A. Wohlfart op bij het kweken van een serie van *Iphiclides podalirius* (Linnaeus) (*Nachr. Bl. bayer Ent.* 30: 114-118, 1981). Waarschijnlijk is dit bij veel, zo niet alle vlindersoorten het geval, maar het is moeilijk te bewijzen zonder flinke broedsels op te kweken of regelmatig veel vlinders te vangen en ze op de sekse te controleren. Eigenlijk is het buiten alleen goed te zien bij dagvlindersoorten die duidelijk sexueel dimorf zijn. Fraaie voorbeelden zijn de witjes in het voorjaar. De mannetjes vliegen soms al een paar weken voor de eerste wijfjes verschijnen. In de zomer is het waar te nemen bij sommige Satyriden (*Hipparchia semele* (Linnaeus), *Pyronia tithonus* (Linnaeus), *Maniola jurtina* (Linnaeus) en bij de Lycaenide *Polyommatus icarus* (Rottemburg)).

Bij de ook makkelijk te controleren *Gonepteryx rhamni* (Linnaeus) overwinteren beide sekse en vindt copulatie pas in het voorjaar plaats. Hier is dus niet van belang welke sekse het eerst uitkomt, maar welke het eerst uit de diapauze ontwaakt. Ook in dit geval lijkt dat weer het mannetje te zijn. Praktisch alle vroege meldingen waarbij ook de sekse vermeld wordt, hebben namelijk betrekking op mannetjes.

De heer Goutbeek spreekt het vermoeden uit dat het uitkomen van mannetjes voor de eerste wijfjes verschijnen een middel zou kunnen zijn om de kans op inteelt te verminderen. Er zou nog aan een ander voordeel voor de soort te denken zijn, namelijk dat het uitgekomen ♀ snel een partner kan vinden.

Overigens lijkt het me niet waarschijnlijk, dat het verschijnsel beperkt is tot de Lepidoptera. B. J. Lempke, Plantage Middenlaan 64, 1018 DH Amsterdam.